

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15FEB2011 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. **Claims 34-42** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. **Claims 34-42** use the terms Voice over Internet Protocol (VoIP) connection unit adapted to, IP communication unit adapted to, IP address obtaining adapted to, determination unit adapted to, and control unit adapted to. Subject to the Supplementary 112 Examination Guidelines published in the Federal Register (76 FR 7162, 09FEB2011) terminology such as that used above can be categorized under means-plus-function terminology. It is unclear whether these terms are intended to invoke 35 U.S.C. 112 6th paragraph. For the purposes of examination the Examiner is interpreting such language as *not* invoking means-plus-function under 35 U.S.C. 112 6th paragraph.

Claim Objections

5. Claims 34, 37, 40 are objected to because of the following informalities:

- Claims 34, 37, and 40, line 32, lines 28-29, and lines 29-30, respectively: insert --station-- after “communication partner” in order to provide proper antecedent basis for “communication partner”.
- Claim 34, lines 33-34: replace “VoIP” with –IP– before “communication unit” as “VoIP communication unit” lacks antecedent basis and appears to be referring to the “IP communication unit” as recited throughout the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claim 34-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nada (US Patent Publication # US 2002/0095516 A1)** in view of **Tanimoto (US Patent # US 7,116,435 B2)** in view of **Mussman et al. (US Patent Publication # US 2004/0139209 A1)**(hereafter **Mussman**).

a) Consider **claims 34, 37, and 40**, Nada clearly shows and discloses, a communication apparatus including a facsimile communication unit adapted to perform facsimile communication using a facsimile protocol, the apparatus comprising: a central processing unit (controller 13)(Nada; figure 2, paragraph [0044]); a memory unit (memory unit 20) coupled to the central processing unit (controller 13)(Nada; figure 2, paragraph [0044]); a Voice over Internet Protocol (VoIP) connection unit (calling side modem 1 and 10, destination side modem 2 and 10) adapted to establish a VoIP channel via an Internet Protocol (IP) network using a VoIP protocol (Nada clearly discloses at the calling side, a modem 1 has an Internet telephone function, and is connected with a telephone set 2 and a personal computer 3. ... At the destination side, a modem 10 has an Internet telephone function, and is connected with a telephone set 11 and a personal computer 10a. The telephone set 11 includes a handset 12. In the Internet telephone system having such a configuration [further described]. Nada clearly discloses the use of an Internet telephone function/Internet telephone system and the use of such a telephone system to communicate via either and IP network or PSN Nada further disclose determining if the destination device is able to communication via the IP network and if so it uses the IP network to communicate. While Nada does not explicitly disclose the use of a VoIP protocol Nada clearly discloses VoIP communication (i.e. telephony over an IP network) which would require the use of VoIP protocol as is well known in the art. Therefore, Nada inherently teaches the use of a VoIP protocol)(Nada; abstract, paragraph [0032]-[0039], [0058], [0059]); an IP address obtaining unit adapted (calling side modem 1 and 10) to obtain an IP address

of the communication partner station (destination side telephone set 11) from server (server 7), based on a telephone number of the communication partner station (destination side telephone set 11)(From the calling side telephone set 2, when the telephone number of the destination side telephone set 11 is entered in the modem 1, the modem 1 accesses the server 7. Next, the modem 1 receives the information of IP address of the modem 10 corresponding to the telephone number of the telephone set 11 from the telephone number information of the destination side telephone set 11 registered in the server 7.)(Nada; abstract, paragraph [0033]-[0039], [0058], [0059]).

However, Nada does not specifically disclose an IP communication unit adapted to communicate image data to a communication partner station via the IP network using a file transmission protocol that is one of a plurality of predetermined file transmission protocols (while Nada discloses a facsimile apparatus with telephone (paragraph [0047]); Nada does not explicitly disclose the use of the facsimile apparatus to send image data or file transmission protocols); obtaining an IP address of the communication partner station from a Session Initiation Protocol (SIP) proxy server (while Nada discloses obtaining the IP address of a the communication partner station from a server (Nada; paragraph [0039], [0058]); Nada does not explicitly disclose that the server is a Session Initiation Protocol (SIP) proxy server); a determination unit adapted to determine whether or not the communication partner station is a station capable of using the VoIP protocol; and a control unit adapted to select the facsimile communication unit or the IP communication unit, in accordance with a determination by the determination unit, wherein, if the determination unit determines that the communication partner station is capable of using the VoIP protocol, the control unit selects the IP communication unit, and, if the determination unit determines that the communication partner station is not capable of using the VoIP protocol, the control unit selects the facsimile communication unit, and wherein, if the control unit selects the IP communication

unit, the control unit causes the IP communication unit to communicate the image data to the communication partner station using the file transmission protocol using the IP address of the communication partner station obtained by the IP address obtaining unit, and, if the control unit selects the facsimile communication unit, the control unit causes the facsimile communication unit to communicate the image data to the communication partner using the facsimile protocol via the VoIP communication channel established by the VoIP connection unit and a gateway using the IP address of the communication partner station obtained by the IP address obtaining unit.

Tanimoto shows and discloses a facsimile device, which cannot only carry out ordinary facsimile communication via a public switched telephone network but also implement real-time internet facsimile communication by the ITU-T T.38 recommendation protocol of International Telecommunication Union (ITU) or send image data of facsimile communication as an email attachment file via a gateway device connected to a computer network like the Internet, wherein Tanimoto clearly discloses an IP communication unit (modem/NCU) adapted to communicate image data (image data) to a communication partner station (FAX2, destination facsimile device) via the IP network (computer communication network, the Internet NTW, NTW) using a file transmission protocol (T.38 or SMTP) that is one of a plurality of predetermined file transmission protocols (T.38 or SMTP)(the receiving and transmitting of image data by facsimile communication via the Internet NTW between both the gateway devices GTW1 and GTW2 can be implemented in case of whether the real-time Internet by T.38 or the email using SMTP, or in case of using both selectively)(Tanimoto; column 8 lines 40-45); a determination unit (main control part 1) adapted to determine whether or not the communication partner station (FAX2, destination facsimile device) is a station capable of using the VoIP protocol (As with Nada above, Tanimoto clearly discloses the use of an Internet telephone function/Internet telephone system and the use of such a telephone

system to communicate via either and IP network or PTSN. Tanimoto further disclose determining if the destination device is able to communication via the IP network and if so it uses the IP network to communicate. While Tanimoto does not explicitly disclose the use of a VoIP protocol Tanimoto clearly discloses VoIP communication which would require the use of VoIP protocol as is well known in the art. Therefore, Tanimoto inherently teaches the use of a VoIP protocol)(Tanimoto; abstract, paragraph [0039], [0058], [0059], [0064]); and a control unit (main control part 1) adapted to select the facsimile communication unit (modem/NCU) or the IP communication unit (modem/NCU), in accordance with a determination by the determination unit (main control part 1)(A transmitting side facsimile device FAX1a determines whether the Internet NTW or the public switched telephone network PSTN is used...)(Tanimoto; abstract, column 8 lines 20-39), wherein, if the determination unit (main control part 1) determines that the communication partner station (FAX2, destination facsimile device) is capable of using the VoIP protocol (i.e. communicating over the IP network (NTW)), the control unit (main control part 1) selects the IP communication unit (modem/NCU), and, if the determination unit (main control part 1) determines that the communication partner station(FAX2, destination facsimile device) is not capable of using the VoIP protocol (i.e. communicating over the IP network (NTW), the control unit (main control part 1) selects the facsimile communication unit (modem/NCU)(Moreover, it is another advantage of the present invention to provide a facsimile device which can send image data using the proper network automatically without users doing special operation, by deciding that image data is transmitted directly to the communication device using the public switched telephone network or that image data is transmitted using the computer communication network via the gateway device...)(Tanimoto; figure 4, abstract, column 3 lines 44-67, column 4 lines 1-5, column 5 lines 4-35, column 8 lines 20-39), and wherein, if the control unit (main control part 1) selects the IP

communication unit (modem/NCU), the control unit (main control part 1) causes the IP communication unit (modem/NCU) to communicate the image data (image data) to the communication partner station (FAX2, destination facsimile device) using the file transmission protocol (T.38 or SMTP) using the IP address (IP address) of the communication partner station (FAX2, destination facsimile device) obtained by the IP address obtaining unit (A facsimile device for transmitting image data, using a computer communication network such as the Internet. A transmitting side facsimile device FAX1a determines whether the Internet NTW or the public switched telephone network PSTN is used... If NTW is used, the IP address of the nearest gateway device GTW in FAX2 is acquired and image data and the destination number is transmitted by designating the IP address as a destination. While Tanimoto discloses the use of the IP address of the nearest gateway device GTW in FAX2 as discussed above Nada clearly discloses obtaining the address of the actual communication partner station in order to communicate)(Tanimoto; abstract, column 3 lines 44-67, column 4 lines 1-5, column 5 lines 4-35, column 8 lines 20-39), and, if the control unit (main control part 1) selects the facsimile communication unit (modem/NCU), the control unit (main control part 1) causes the facsimile communication unit (modem/NCU) to communicate the image data to the communication partner (FAX2, destination facsimile device) using the facsimile protocol (T.38) via the VoIP communication channel (NTW) established by the VoIP connection unit (modem/NCU) and a gateway (GW1, GW2) using the IP address of the communication partner station (FAX2, destination facsimile device) obtained by the IP address obtaining unit (A facsimile device for transmitting image data, using a computer communication network such as the Internet. A transmitting side facsimile device FAX1a determines whether the Internet NTW or the public switched telephone network PSTN is used... If NTW is used, the IP address of the nearest gateway device GTW in FAX2 is acquired and image data and the destination

number is transmitted by designating the IP address as a destination. While Tanimoto discloses obtaining the IP address of the nearest gateway device GTW in FAX2 as discussed above Nada clearly discloses obtaining the address of the actual communication partner station in order to communicate)(Tanimoto; abstract, column 3 lines 44-67, column 4 lines 1-5, column 5 lines 4-35, column 8 lines 20-39).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Tanimoto and Nada since both concern telephony over an IP network and/or public switched telephone network (PSTN, a.k.a. public switching network (PSN)) depending on the capabilities of the devices involved in the communication and as such, both are within the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the ability to communicate image data via an IP network and/or public switched telephone network (PSTN) depending on the capabilities of the devices involved in the communication, as taught by, Tanimoto into the system of Nada for the purpose of communicating image data (Tanimoto; abstract), thereby allowing image data to be transmitted via an IP network and/or public switched telephone network (PSTN) as needed.

However, Nada as modified by Tanimoto does not specifically disclose obtaining an IP address of the communication partner station from a Session Initiation Protocol (SIP) proxy server (while Nada discloses obtaining the IP address of the communication partner station from a server (Nada; paragraph [0039], [0058]).

Mussman shows and discloses routing calls through networks includes a device configured to support a first protocol for initiation, maintenance, and termination of a communication session between call endpoints, and to support a second protocol for resolving endpoint addresses for the

communication session, wherein Mussman clearly discloses obtaining an IP address of the communication partner station from a Session Initiation Protocol (SIP) proxy server (SIP is a signaling protocol that can facilitate initiation, maintenance, and termination of a communication session between SIP user agents, SIP software included in or accessible by a device. A SIP user agent (called a client when sending a request) can send a communication session request to another user agent (called a server when receiving and responding to a request) over an IP network)(Mussman; paragraph [0003], [0013], [0014]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Mussman and Nada as modified by Tanimoto since both concern routing of communication (i.e. audio, video, data, etc.) over a network and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate using SIP (Session Initiation Protocol), as taught by, Mussman into the system of Nada as modified by Tanimoto for the purpose of initiation, maintenance, and termination of a communication session (Mussman; abstract), thereby allowing communication session to be established.

b) Consider **claims 35, 38, and 41, and as applied to claims 34, 37, and 40 above**, Nada as modified by Tanimoto as modified by Mussman clearly show and disclose, the communication apparatus, control method, and non-transitory computer-usable medium according to claims 34, 37, and 40, wherein the determination unit (main control part 1) judges whether the data communication (image data transmission) can be performed with the communication partner station (FAX2, destination facsimile device) via the VoIP communication channel (NTW), by interpreting the telephone number of the communication partner station (FAX2, destination facsimile device)(A

transmitting side facsimile device FAX1a determines whether the Internet NTW or the public switched telephone network PSTN is used, by confirming whether information showing to use NTW is attached to the facsimile number of the destination facsimile device FAX2)(Tanimoto; abstract, column 3 lines 44-67, column 4 lines 1-5, column 10 lines 57-67), and wherein, if the data communication (image data transmission) cannot be performed with the communication partner station (FAX2, destination facsimile device) via the VoIP communication channel (NTW), the control unit (main control part 1) calls the communication partner station (FAX2, destination facsimile device) on a line switching network (PSTN) and causes the facsimile communication unit (modem/NCU) to perform analog facsimile communication (a facsimile device which can send image data using the proper network automatically without users doing special operation, by deciding that image data is transmitted directly to the communication device using the public switched telephone network or that image data is transmitted using the computer communication network via the gateway device according to the content of the network information corresponding to the discrimination information)(Tanimoto; abstract, column 3 lines 44-67, column 4 lines 1-5, column 8 lines 20-40).

c) Consider claims 36, 39, and 42 and as applied to claims 34, 37, and 40 above, Nada as modified by Tanimoto as modified by Mussman clearly show and disclose, the communication apparatus, control method, and non-transitory computer-usable medium according to claims 34, and 37, wherein the determination unit (main control part 1) judges whether the data communication (image data transmission) can be performed with the communication partner station (FAX2, destination facsimile device) via the VoIP communication channel (NTW), by interpreting the telephone number of the communication partner station (FAX2, destination facsimile device)(A transmitting side facsimile device FAX1a determines whether the Internet NTW or the public

switched telephone network PSTN is used, by confirming whether information showing to use NTW is attached to the facsimile number of the destination facsimile device FAX2)(Tanimoto; abstract, column 3 lines 44-67, column 4 lines 1-5, column 10 lines 57-67), and wherein, if the communication can be performed with the communication partner station (FAX2, destination facsimile device) via the VoIP communication channel (NTM), the IP address obtaining unit tries to obtain the IP address of the communication partner station (FAX2, destination facsimile device) from the SIP proxy server (A facsimile device for transmitting image data, using a computer communication network such as the Internet. A transmitting side facsimile device FAX1a determines whether the Internet NTW or the public switched telephone network PSTN is used... If NTW is used, the IP address of the nearest gateway device GTW in FAX2 is acquired and image data and the destination number is transmitted by designating the IP address as a destination. While Tanimoto discloses obtaining the IP address of the nearest gateway device GTW in FAX2 as discussed above Nada clearly discloses obtaining the address of the actual communication partner station in order to communicate. The use of a Sip proxy server is taught by Mussman as discussed above)(Tanimoto; abstract, column 3 lines 44-67, column 4 lines 1-5, column 8 lines 20-40).

Response to Arguments

9. Applicant's arguments with respect to **claims 34, 37, and 40** have been considered but are moot in view of the new ground(s) of rejection.

Applicant states that "It is not clear from the Office Action which portion of *Nada* is relied on to set forth such a teaching, as the same portions of *Nada* are cited by the Examiner for each feature of the claims. Applicant requests clarification regarding what portion of the references being relied on to teach each feature of the present invention in the next communication."

While, the Examiner has issued new grounds of rejection and has taken Applicant's request for clarification into account in both the rejection above and the response to arguments below. If it is still unclear to the Applicant what portion of the references are being relied on to teach each feature of the present invention after reading this response then Applicant is strongly encouraged to contact the Examiner for an interview at which point the Examiner is more than will to address Applicant's concerns.

Applicant argues that *Nada* "...fails to teach determining whether or not a communication partner station is capable of using the VoIP protocol." and

"...Rather, as discussed above, *Nada* teaches switching a transmission line without knowing whether or not a partner has an internet telephone. *See* paragraphs [0058]-[0060] of *Nada*."

The Examiner respectfully disagrees; *Nada* clearly discloses determining whether or not a communication partner station is capable of using the VoIP protocol (*Nada*; abstract, paragraph [0032]-[0039], [0058], [0059]).

Nada clearly disclose at the calling side, a modem 1 has an Internet telephone function, and is connected with a telephone set 2 and a personal computer 3. ... At the destination side, a modem

10 has an Internet telephone function, and is connected with a telephone set 11 and a personal computer 10a. The telephone set 11 includes a handset 12. In the Internet telephone system having such a configuration [further described in the cited paragraphs (at least)].

Nada clearly discloses the use of an Internet telephone function/Internet telephone system and the use of such a telephone system to communicate via either and IP network or public switched network (PSN). Nada further discloses determining if the destination device is able to communicate via the IP network and if so it uses the IP network to communicate. Nada clearly discloses determining if the communication partner station is capable of communicating over an IP network and while Nada does not explicitly disclose the use of a VoIP protocol Nada clearly discloses VoIP communication (i.e. telephony over an IP network) which would require the use of VoIP protocol as is well known in the art.

Nada clearly describes the use of an Internet telephone system which communicates over an IP network and would require the use of VoIP protocol to do so. Nada also clearly discloses determining if the destination side is capable of receiving communication via the IP network (and consequently is capable of using VoIP protocol).

Therefore, Nada clearly discloses determining whether or not a communication partner station is capable of using the VoIP protocol.

Regarding Applicant's above argument that *Nada* teaches switching a transmission line without knowing whether or not a partner has an internet telephone; it appears that Applicant has misinterpreted the reference. The paragraphs Applicant cites are listed below for convenience:

In FIG. 1, a telephone number of the destination side telephone set 11 is entered in the calling side telephone set 2. The modem 1 accesses the server 7 to check if the IP address corresponding to the telephone number is present or not. At this time, if there is no IP address

corresponding to the telephone number of the partner in the server 7, the following operation is executed (Nada; paragraph [0058]).

The controller 13 shown in FIG. 2 judges that the partner does not have an Internet telephone, and changes over the transmission line switch 19 from the audio processor 17 side to the PSN interface 14 side. Thus, a call is made to the partner through the PSN (Nada; paragraph [0059]).

Therefore, the user can make a telephone call in a conventional procedure without knowing whether the partner has an Internet telephone or not (emphasis added)(Nada; paragraph [0060]).

Nada clearly discloses switching a transmission line by determining whether or not a partner has an internet telephone. Nada clearly discloses in the above cited paragraphs as well as other portions of the reference that the calling side modem accesses the server once a telephone number has been enter in order to determine if telephone number of the destination side has a corresponding IP address. In fact Nada clearly discloses when each modem acquires the IP address, mutual IP addresses are registered in relation to the telephone numbers in the common server 7 beforehand (paragraph [0040]).

So while the *user* may not know whether the partner has an Internet telephone or not, the system of Nada clearly does.

Conclusion

The Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant, in preparing the responses, to fully consider each of the cited references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage disclosed by the Examiner.

With respect to any amendments to the claimed invention, it is respectfully requested that Applicant indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

If Applicant intends to make numerous amendments the Examiner respectfully requests that Applicant submit a clean copy of the claims in addition to the marked up copy of the claims in order to expedite the examination process.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (See PTO-Form 892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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